THE IMPACT OF INFORMATION TECHNOLOGY IN ECONOMIC DEVELOPMENT IN INDIA

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ABSTRACT

India has been regarded the IT engine of the world. It has likewise turned into a favoured goal for Business Process Outsourcing administrations. Over the previous decade, the Information Technology industry has turned out to be one of the quickest developing businesses in India, impelled by sends out. IT enterprises represent 6% of the GDP of India and give business specifically or in a roundabout way to more than 2.3 million individuals. It additionally contributes essentially to India's fares. The key fragments that have contributed essentially (96% of aggregate) to the business' fares incorporate Software and IT empowered administrations i.e. business administrations. Over some undefined time frame, India has set up itself as a favoured worldwide sourcing base in these fragments and they are required to keep on fuelling development later on. The IT can possibly raise the long haul development prospects through expanded profitability in relatively every area of the economy. The development of the IT area is required to achieve a comparing development in different parts like work, sends out and Foreign Direct Investments. The essential target of this paper is to break down the connection between Information Technology and Indian Economy and look at its effect in India's financial advancement. IT segment is additionally personally connected to other applicable divisions like biomedical innovation, resistance and foundation. Therefore the fate of the IT segment will straightforwardly affect the development of the country.

Key words: Information technology, economic development, business, services, foreign direct investment.

Introduction

The time of 21st century is regularly viewed as a time of data innovation and is currently changing our way of life and social awareness powerfully. Data innovation industry is one of the quickest developing, learning and expertise serious industry in India. India's IT potential is on an unfaltering walk towards worldwide intensity, enhancing barrier abilities and getting together vitality and condition challenges among others.

Indian data innovation Industry is considered as a pioneer in programming improvement and a most loved goal for IT-empowered administrations. The Indian IT part remains a prevailing player in the worldwide market, and that we rise as one of the main nations of the new thousand years. The Indian IT industry started under extremely horrible conditions. Amid past circumstances nearby markets were truant and government strategy toward private venture was antagonistic. The Indian IT Industry was started by Bombay-based combinations that entered the business by providing software engineers to worldwide IT firms found abroad.
Impact of Information Technology on Indian Economy:
This paper audits a few interrelated parts of the effect of data innovation in the advancement of India's economy. The data innovation can possibly raise the long haul development prospects through expanded profitability in relatively every area of the economy. The resurgence of the American economy since 1995 is an exemplary case of the same. As per Greenspan (2000), the IT has created an essential change in the US economy, prompting a lasting change in development prospects. A specific industry that has been instrumental in the development of the Indian economy is the IT part. The plan, advancement, execution or administration of data frameworks is alluded to as data innovation. It portrays the generation, stockpiling, control and dispersal of data. IT enterprises represent 8.5% of the GDP of India and give work specifically or in a roundabout way to more than 3.5 million individuals. It additionally contributes fundamentally to India's fairs: representing around 24% of every 2011. India creates around 2,50,000 actually and socially proficient architects consistently. A large portion of them move to created nations and frame a vital piece of the workforce there, along these lines turning into India's most adored fare. In the 21st century, India has ascended to the situation of one of the biggest IT capitals of the world. Starting at 2011, mechanically slanted administrations division in India represented 45% of the nation's GDP and 30% of fare profit.

1. E-Commerce:
Web based business can be deciphered extensively to incorporate business-to-business (B2B) exchanges, or even inner procedures. The last are taken up in the following area, in a discourse of assembling. B2B exchanges are a piece of the inventory network, and administration of the store network is additionally a feebble connection in India. These complementarities emerge from exchanges arranged in the B2B field. Actually, creating nations have the chance to jump over more established, more costly methodologies, for example, Electronic Data Interchange, which speak to critical inheritance interests in nations, for example, the US.

2. Manufacturing sector:
Contrasted with numerous other creating nations, India's assembling division has assumed an unordinary part in the national development encounter. In 1950-51, the primary year for which practically identical information is accessible, fabricating was around 9% of GDP. By 1979-80, this proportion had risen near 15%, yet from that point has barely expanded. The most astounding offer of assembling in any year was in 1996-97, at 16.6%: after then the figure has floated on either side of 16%, even in the years when India's GDP developed at more than 9% annually.19 In this unique situation, the new National Manufacturing Policy's (NMP, 2012) express objective of expanding assembling's offer to 25% by 2022 is to a great degree yearning.

3. E-Governance:
Poor open administration conveyance is a noteworthy indication of poor legislative execution in India at all levels. The issue is most likely more intense at the sub national level since everyday and essential administrations --, for example, medicinal services, training, water and sanitation -- are increasingly the duty of sub national levels, while, in the meantime, these levels of government have been impeded as for monetary and authoritative limit. Increments in support governmental issues and lease looking for after some time have additionally brought about a decrease in the nature of open use. Seeing this circumstance as far as the working of responsibility systems, regardless of whether of chose authorities to residents or of other government representatives to chose authorities, a noteworthy issue is absence of good data streams both inside government and crosswise over government limits to nationals.
4. Human capital and infrastructure:
Accessibility and satisfactory supply of gifted work and proficient work constrain and the nature of framework is basic for the development of data innovation industry in India. A critical explanation behind the accomplishment of Indian IT industry has been its extensive supply talented workforce.

5. Share in Exports:
The Indian Software and administrations industry is trade driven. In 2008-09, the aggregate estimation of programming and administrations send out is evaluated at Rs. 2,36,300 Crores (US$ 49 billion), an extension of 31.6 for every penny in rupee terms and 16.3 for every penny in dollar terms. IT-ITES sends out is assessed to net USD 86 billion in FY2014-15 developing by13.5% over FY2009-2015 and contributing about 85% of the aggregate IT-ITES incomes (barring equipment). Amid the FY2014-15 IT-ITES/BPO sends out is probably going to be at USD 25 billion, with a development rate of 14.5% amid FY2014-15.

6. Employment Generation:
NASSCOM report expressed that amid 2015, the IT business included 180,000 workers and gave guide work to 3.5 million individuals and backhanded work to 10million individuals. This division has additionally prompted huge business age. The business keeps on being a net work generator anticipated that would include 250,000 occupations in FY2015, along these lines giving direct work to around 3.5 million, and in a roundabout way utilizing 9.5 million individuals. The potential commitment of data innovation to business age is both immediate and backhanded.

7. IT-BPO Industry:
The numbers on India's IT industry have a tendency to be all around plugged by the business affiliation, NASSCOM. It has more than 1250 individuals, more than 66% of which have yearly incomes surpassing US$ 45 million ("vast" as per NASSCOM's own classification).5 This affiliation speaks to programming (counting administrations and items), and in addition business process outsourcing (BPO), yet prohibits equipment produce. The last term has for the most part supplanted a before term, IT-empowered administrations (ITES), in portraying an entire scope of exercises driven by its utilization in different structures. Fares keep on being basic to India's IT-BPO area, representing more than 3/4 of its incomes (US$ 75 billion).

8. Rural Development:
It might appear to be incomprehensible that advanced IT, ordinarily connected with created nation markets and capital-escalated techniques for generation, has any importance for a nation where many millions, especially in country regions, still need essential needs of wellbeing, training and sanitation. By the by, there are numerous endeavors in progress in India and other creating nations to exhibit its solid advantages for rustic populaces, and to do as such in a way that bodes well. The general assumption behind these endeavors is that assets spent in this way have a positive profit for advancement sufficiently expansive to legitimatize a conceivable preoccupation from different utilization that straightforwardly address those essential needs.

Promotion of IT - governmental incentives:
With the development of another service for IT, Government of India (GOI) has made a noteworthy stride towards advancing the local business and accomplishing the maximum capacity of the Indian IT business visionaries. As of late, IT board of trustees was set up by the Ministry of Information Technology, Government of India, containing Non-Resident Indian (NRI) experts from the United States to look for mastery and guidance and furthermore to venture up U.S. interests in India's IT part. The board is led by Minister of Information Technology, Government of India, and the individuals incorporate Secretary, Ministry of Information Technology and a substantial number of critical Indian American IT business people.

India's most prized asset in the present information economy is its promptly accessible specialized work drive. India has the second biggest English-talking logical experts on the planet, second just to the U.S. It is evaluated that India has more than 4 million specialized laborers, more than 1,832 instructive organizations and polytechnics, which prepare in excess of 67,785 PC programming experts consistently. Legislature of India is venturing up the number and nature of preparing offices in the nation to gain by this phenomenal human asset. It is the learning business that will help take the Indian economy to a supported higher rate of development and the arrangement creators are completely mindful of this.

IT & ITeS Industry in India
- IT BPM industry revenues (excluding hardware) is estimated at around US$ 130 billion in FY 2015-16 and is estimated to be at US$ 154 billion in FY 2016-17.
- The contribution of the IT sector to India’s GDP stood at 7.7 per cent in 2016.
- TCS is the market leader, accounting for about 10.4 per cent of India’s total IT & ITeS sector revenue in FY16
- The top 5 IT firms contribute over 25 per cent to the total industry revenue, indicating the market is fairly competitive.
- The domestic revenue of the IT industry is estimated at US$ 38 billion and export revenue is estimated at US$ 117 billion in FY17.
India is the world's largest sourcing destination, accounting for approximately 55 per cent of the US$ 173-178 billion market in 2016-17. The country's cost competitiveness in providing Information Technology (IT) services, which is approximately 3-4 times cheaper than the US, continues to be its Unique Selling Proposition (USP) in the global sourcing market. The sector ranks 3rd in India's total Foreign Direct Investment (FDI) share and has received US$ 27.72 billion of FDI inflows between April 2000 and September 2017. India's highly qualified talent pool of technical graduates is one of the largest in the world and is available at a cost saving of 60-70 per cent to source countries. This large pool of qualified skilled workforce has enabled Indian IT companies to help clients save US$ 200 billion in the last five years.
Revenue of India’s IT industry reached US$ 154 billion and exports stood at US$ 117 billion in 2016-17. The Business Process Management (BPM) segment accounted for 22.22 per cent of the total IT exports during FY17. India’s IT-BPM sector is expected to expand to US$ 350 billion by 2025 and BPM is expected to account for US$ 50-55 billion out of the total revenue.

The Government of India has extended tax holidays to the IT sector for software technology parks of India (STPI) and Special Economic Zones (SEZs). Further, the country is providing procedural ease and single window clearance for setting up facilities.

Under Union Budget 2018-19, the government has announced setting up of a national level programme that will enable efforts in Artificial Intelligence (AI) and will help in leveraging AI technology for development works in the country.

**Direct Contribution to the Indian Economy**

The Indian IT industry has grown almost tenfold in previous decade. Domestic software has grown at 46 per cent while software exports have grown at 62 per cent over the last 5 years. The current and evolving role of IT/ITES industry in India's economy is well established. The sector is proving to be the major growth pole within the services sector, which in turn drives several economic indicators of growth in the country. A few key indicators of direct contribution are:

- **Growing share of the country's GDP**: The sector's contribution to the country's GDP has been steadily increasing from a share of 1.2% in FY98 to 5.2% in FY07
- **Boosting the foreign exchange reserve of the country**: Export earnings in FY08 stood at approximately USD 40.0 billion with a growth of 36%.
- **Employment generation**: Direct employment in the sector is expected to be 2.0 million by end of FY08, growing at a CAGR of 26% in the last decade, making it the largest employer in the organized private sector of the country. Additional employment generation: The indirect employment generated, at the rate of 4 additional jobs created in the economy for every 1 job created in the sector, is even more socially relevant as nearly 75% of the workforce employed in those additional jobs are SSC/HSC or less educated. Driving growth of other sectors of the economy: Apart from contributing to the growing income of its direct stakeholders (promoters, shareholders and employees), the IT/ITES industry has a multiplier effect on other sectors of the economy with an output multiplier of almost 2 through its non-wage operating expenses, capital expenditure and consumption spending by professionals. Study show that USD 15.85 billion spent by the IT/ITES industry in the domestic economy in FY06 generates an additional output of USD 15.5 billion.

- **Encouraging balanced regional development**: By gradually spreading their business operations to smaller Tier II/III cities, the IT sector (besides generating revenue and employment) is also assisting in improving the supply of talent pool and development of physical and social infrastructure, either directly by themselves or by spurring the Government to action. In case of Bhubaneswar (a Tier III city), some of the key impact of the IT/ITES sector has been:
  1. **Increase in software exports**: Software exports from the state reached USD 183 million in 06-07, a 60% rise over exports in 05-06, on track to reach the target of 500mn USD by 2011-12.
  2. **Increase in registered IT/ITES units**: The number of registered and exporting units has risen steadily showing a CAGR of 118 and 170% respectively, as compared to 98-99. Besides the capacity expansion of existing units, many of the big companies are also setting up operations in the city.
  3. **Employment**: Supply of IT professionals, which was higher than demand till 2004, now have a shortfall of 62,697. Demand for IT professionals is expected to reach 430,000 by 2011-12 with the corresponding figures on indirect employment being 1,720,000.
  4. **Education**: While building and expanding capacity of educational institutes are underway, IT majors are undertaking training initiatives to improve student quality. At least 5 new educational institutions (including IIT and IIT Kharagpur campus) by both Government and private players are also being set up. Infrastructure and other amenities - Keeping in line with the expansion/entry plans of major IT/ITES companies, IT parks and townships are being built with a corresponding improvement in other amenities like roads, housing, retail and entertainment facilities.

Table 1 - India's GDP and Information Technology Industry Growth

<table>
<thead>
<tr>
<th>Years</th>
<th>GDP Growth (USD Billion)</th>
<th>IT Growth (USD Billion)</th>
<th>%age share of IT Industry in GDP</th>
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<td>1997-98</td>
<td>411.570</td>
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<td>1998-99</td>
<td>440.597</td>
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<td>1999-00</td>
<td>461.914</td>
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<td>473.050</td>
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<td>494.997</td>
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<td>2002-03</td>
<td>573.167</td>
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<td>2009-10</td>
<td>1198.36</td>
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</table>

**Latest Developments:**

- National e-Governance Plan (NeGP): The Government of India intends to give high need to enhance the quality to the residents by giving fundamental administrations at their doorstep for which it has figured a NeGP covering 27 mission mode ventures.

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State Wide Area Networks (SWANs): The Government has begun a plan for setting up SWANs the nation over in 29 states with an aggregate estimation of US$ 682.27 million over a time of five years.

State Data Centers (SDCs): SDCs have been distinguished essential for the center foundation of supporting e-Governance activities under NeGP.

Common Service Centers (CSCs): The fundamental goal of CSCs is to build up a stage that can empower Government, private and social division associations to cater their social and business objectives for the advantage of the rustic populace in the nation with a blend of IT-based and in addition non-IT-based administrations.

Community Information Centers (CIC): Government has started the CIC’s in the bumpy and far-flung rustic zones of the nation with fundamental target to convey the advantages of ICT to the general population with the end goal of financial advancement. Nanotechnology: Department of Information Technology began nanotechnology advancement program amid the tenth arrangement with the point of making framework for inquire about in nanoelectronics and nanometrology at the national level.

Conclusion:

This paper has given a survey and outline of different features of IT in India's economy. The most clear of these is simply the IT segment, including IT empowered administrations, for example, business process outsourcing. This division has ended up being strong and imaginative, proceeding to grow and redesign its offerings. The fare introduction of the area has added to its focused teach and achievement, however that achievement has never been an inescapable result.

The Indian Information innovation industry is becoming lively and adds to the improvement of Indian economy. It gives fundamental data framework to the improvement of all enterprises. In this way, the present investigation presumes that the Indian IT industry is developing consistently and decidedly contributes as far as pay and work to the informed mass and to the development of the Indian economy.

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